

Figure legends

Supplementary Figure 1a

Melting curve plots obtained from HERV-Fc1 *gag* DNA sequences amplified by absolute Q-PCR and the calibration curve used for viral HERV-Fc1 *gag* DNA copy number quantification

The melting curve analysis showed one peak corresponding to the specific PCR product (83⁰C). The absolute quantification analyses were done with fluorescence signals captured at 72⁰C. No signal was observed for the negative control (dH₂O). Regression curve for HERV-Fc1 *gag* DNA quantification using SYBR Green Q-PCR. DNA standard dilutions range (2.0 x 10¹ to 2.0 x 10¹⁰).

Supplementary Figure 1b

Melting curve plots obtained from HERV-Fc1 *gag* RNA sequences amplified by absolute Q-PCR and calibration curve used for extracellular HERV-Fc1 *gag* RNA copy number quantification

The melting curve analysis showed one peak corresponding to the specific PCR product (83⁰C). The absolute quantification analyses were done with fluorescence signals captured at 72⁰C. No signal was observed for the negative control (dH₂O). Regression curve for HERV-Fc1 *gag* RNA quantification using SYBR Green Q-PCR. RNA standard dilutions range (5.52 x 10² to 5.52 x 10⁸).

Supplementary Figure 2

Specificity of the HERV-H/F Gag Flow Cytometry assay with anti HERV-H/F antibodies

Histogram showing no overlap in the emission spectra of the control PBMCs labeled with FITC antibody (control), pre-immune serum (control) or anti-HERV-H/F Gag antibodies.

Supplementary Figure 3

Flow Cytometry Compensation

Compensation analyses excluding inherent overlap of the emission spectra from antibody fluorescent labels. Optimum compensation % settings were achieved by adjusting high voltage settings for PMT detectors using the negative controls, followed by individual stained samples. PMT- photomultiplier tube.

Supplementary Figure 4

HERV-H/F Gag expression in healthy controls (immune-staining).

Cytospins were prepared on samples analysed by flow cytometry. Total PBMCs from three control individuals were stained with anti-HERV-H/F Gag antibodies or with the appropriate control, pre-immune serum. Left panel; samples stained with anti-HERV-H/F Gag antibodies, right panel; sample stained with pre-immune serum.